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# Intrapreneurship

## Employees' Attitude and the Appropriate Working Environment

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**Abstract—** Because of its positive impact on organizational growth and innovation, intrapreneurship has attracted interest in recent times. While its positive impact on organizations benefitted from extensive research over the last years, research on the willingness of employees to adopt intrapreneurial behavior remains low. This paper therefore aims to evaluate the attitudes of employees towards intrapreneurial behavior at work and what kind of working environments are suitable to encourage such behavior. Thereby, the potential risk related to such behavior is placed in the wider risk literature and then critically analyzed. The paper provides a theoretical background on intrapreneurship evincing the development of terms and definitions and identifying relevant authors in this research area. Based on previous research, the analysis of data provides new insights on employees' willingness to adopt intrapreneurial behavior and what working environments might be appropriate to support such behavior and enriches and deepens the understanding of these aspects. The findings show most respondents tended to aspire to intrapreneurial behavior and felt positively motivated towards shaping the organization's future. However, the related working environments are not always suitable and supportive for intrapreneurial behavior. Future research and the collection of further data could further enhance the understanding of employees' behavior and motivation related to intrapreneurship and a distinction of employees' and employers' thoughts might help to gain new knowledge in this field.

**Keywords—***Intrapreneurship; Corporate Entrepreneurship; Organisational Behavior; Innovation; Risk*

### I. INTRODUCTION

Innovation has been widely acknowledged by researchers and practitioners to be one of the main drivers of economic success (Avermaete et al., 2003; Chesbrough, 2003; Cooper, 1990). According to various authors such as Calisto and Sarkar

(2017), Harms (2015) and Menzel, Aaltio and Ulijn (2007), Intrapreneurship can stimulate organizations' success and works as an incubator for innovation. Therefore, it became an important research field within the area of management research (Antoncic and Hisrich, 2001; Edú Valsania, Moriano and Molero, 2016).

Various aspects related to the positive impact of intrapreneurial behavior, for example on innovation and organizations' ability to thrive in today's rapidly changing business environments, have benefitted from extensive research during the last years (Alperovitz, 2013; Alpkhan et al., 2010; Hamel and Breen, 2007; Shipper et al., 2014). However, research on individuals' entrepreneurial behavior within organizations and their willingness to adopt such behavior remains low (Reuther and Schumann, 2016; Zahra, Jennings and Kuratko, 1999). Thus, it is argued that "the literature is biased towards the organizational level while individuals are somewhat overlooked" (de Jong and Wennekers, 2008).

This paper therefore aims to evaluate the attitudes of employees towards intrapreneurial behavior at work and what kind of working environments are suitable to encourage such behavior. Thereby, the potential risk related to such behavior is critically analyzed.

In order to analyze employees' willingness to adopt intrapreneurial behavior and the appropriate working environment, this paper addresses the following aspects: First, the theoretical background of intrapreneurship including the evolution of this research field over the years and the risk related to intrapreneurship are set out to provide a general understanding of the terms and an overview of related research that has been done before. Then, after a presentation of the research methodology, the collected data is analyzed in order to outline employees' thoughts and attitudes towards their organizations

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TABLE I. DEVELOPMENT OF INTRAPRENEURSHIP

<p>The diagram is a horizontal timeline from 1970 to 2011. It is divided into two main sections by a vertical line around 1983. The first section, 'Initial Development of Terms', covers the years 1970 to 1983 and includes milestones: Peterson and Berger (1971), Pinchot (1978), Hutt (1981), Schollhammer (1982), and Burgelman (1983). The second section, 'Examples for Further Development of Intrapreneurship Definitions', covers the years 1985 to 2011 and includes milestones: Pinchot (1985), Rule and Irwin (1988), Gibb (1996), Antoncic and Hisrich (2001), and Parker (2011). Above the timeline, the terms 'Entrepreneurial Leadership Styles' and 'Intrapreneurship' are marked at various points.</p>	
<b>Peterson and Berger (1971)</b>	Three adaptations to the potential <b>entrepreneur-organization</b> : (1) A small and loosely structured organization allows entrepreneurs to manage their own business in turbulent times; (2) An organization eliminates the need for entrepreneurship in nonturbulent times; (3) A large organization may adapt to the requirements of entrepreneurship when it cannot reduce the turbulence of at least one important segment of its environment.
<b>Pinchot (1978)</b>	<b>Intrapreneurs</b> are the new class of intra-corporate entrepreneurs.
<b>Hutt (1981)</b>	<b>Shared Entrepreneurship</b> describes the shared ownership of a firm partially owned by shareholders and workers.
<b>Schollhammer (1982)</b>	<b>Internal Corporate Entrepreneurship</b> refers to all formalized entrepreneurial activities within existing business organizations. Formalized internal entrepreneurial activities are those which receive explicit organizational sanction and resource commitment for the purpose of innovative corporate endeavors new product development, product improvements, new methods or procedures
<b>Burgelman (1983)</b>	<b>Corporate Entrepreneurship</b> refers to the process whereby the firms engage in diversification through internal development. Such diversification requires new resource combinations to extent the firm's activities in areas unrelated, or marginally related to its current domain of competence and corresponding opportunity set
<b>Miller (1983)</b>	<i>The three entrepreneurial postures of risk taking, innovativeness, and proactiveness can be applied to corporate processes as well as to new independent ventures.</i>
<b>Pinchot (1985)</b>	<b>Intrapreneurs</b> are “dreamers who do”; those who take hands-on responsibility for creating innovation of any kind within an existing organization.
<b>Rule and Irwin (1988)</b>	<b>Intrapreneurship</b> is the entrepreneurial capability of an established corporation including entrepreneurial qualities such as creativity and innovation.
<b>Gibb (1996)</b>	<b>Intrapreneurship</b> is “the harnessing of entrepreneurial behavior within the large company or institution associated with changes in corporate culture, organization and structures often in favor of smallness and decentralization”.
<b>Antoncic and Hisrich (2001)</b>	<b>Intrapreneurship</b> describes behaviors by which, without having been requested to do so, employees innovate and seek business opportunities to benefit the organization.
<b>Parker (2011)</b>	<b>Intrapreneurship</b> is the practice of developing a new venture within an existing organization, to exploit a new opportunity and create economic value.

and intrapreneurial behavior and to evaluate appropriate working environments that can support intrapreneurship. Finally, conclusive statements about the willingness of questioned employees to adopt intrapreneurial behavior are made and a suitable environment for intrapreneurship at work including the related risks is outlined on this basis.

## II. THEORETICAL BACKGROUND

In the middle of the 20<sup>th</sup> century, an early development towards changing paradigms about people in organizations is observable through various scientific publications. When Douglas McGregor developed Theory Y, he assumed that employees have no inherited dislike of work (McGregor, 1960) and contradicts Taylor, who supposed that even if there were some highly motivated workers they would see colleagues who are lazy receiving the same payment and therefore become lazy themselves (Taylor, 1911). This is supported by Herzberg, who argues, that human beings have the natural need to avoid boredom and that work can become satisfactory (Herzberg, 1966). Maslow furthermore found that employees could be more creative by the ‘*expression*’ of their ideas rather than just ‘*coping*’ with given problems (Maslow, 1970). It is assumed, that these new perspectives towards employees’ mind-sets contributed to the development of the first ideas of intrapreneurship. According to Ping et al. (2010), research on intrapreneurship originated from Peterson and Berger (1971) who assessed entrepreneurial leadership styles as strategies within large organizations.

Although associated terms like corporate entrepreneurship have already been used in the 1930s (Lewis, 1937), Ping et al. argue that an intensification of research in this field is observable from the 1970s onwards, when a parallel development of various related concepts was released.

In 1978, Pinchot came up with the term ‘intrapreneurship’ (Pinchot, 1978) that was later defined as taking hands-on responsibility for creating innovation of any kind, within an organization. Miller (1983) was the first author shifting the focus of entrepreneurship research from an individual to a corporate level. In this course, the closely related and today often synonymously used terms Intrapreneurship (Pinchot, 1985; Pinchot, 1978; Rule and Irwin, 1988), internal corporate entrepreneurship (Schollhammer, 1982), corporate entrepreneurship (Burgelman, 1983; Zahra, 1991) and shared entrepreneurship (Adams et al., 2014; Hutt, 1981; Shipper et al., 2014) were introduced. Because of this large number of terms and explanations, intrapreneurship is still a loosely defined term (Gibb, 1996) that is used differently by different authors and different terms are used to describe the same phenomenon (Sharma and Chrisman, 2007). It however always refers to the ‘*expression*’ of employees’ creative ideas through entrepreneurial behavior on a corporate level. The initial development of various terms and the further development of Intrapreneurship definitions is outlined in table I.

Over the years, several aspects related to intrapreneurship have been intensively researched. To provide an overview of research with a high impact in the field, leading papers by the number of citations have been tracked. According to this, the research of Wennekers and Thurik (1999), Antoncic and Hisrich (2001); (2003), (Shah and Tripsas, 2007) and Alpkhan et al.

(2010) ranks among the most influential articles in the field what is displayed in table II.

TABLE II. INFLUENTIAL PAPERS ON INTRAPRENEURSHIP (MARCH 2017)

Paper	Citations According to	
	Publisher	Research Gate
Wennekers and Thurik (1999) Linking Entrepreneurship and Economic Growth	382	992
Antoncic and Hisrich (2001) Intrapreneurship: Construct refinement and cross-cultural validation	261	410
Shah and Tripsas (2007) The accidental entrepreneur: the emergent and collective process of user entrepreneurship	136	222
Antoncic and Hisrich (2003) Clarifying the Intrapreneurship concept	118	240
Alpkhan et al. (2010) Organizational support for intrapreneurship and its interaction with human capital to enhance innovative performance	99	120

Although Wennekers and Thurik (1999) lead this list, their research focus rather lies on an evaluation of the links between entrepreneurship and economic growth than exploring intrapreneurship. Nonetheless, they highlighted the idea and importance of entrepreneurial activity within large firms and categorized three kinds of corporate entrepreneurship based on the research of Stopford and Charles (1994). These are (1) intrapreneurship – the creation of new businesses or business units within an existing organization, (2) the transformation or strategic renewal of existing organizations and (3) the change of ‘rules of competition’ for the industry, for example by carrying out an innovation that fundamentally alters the industry (Wennekers and Thurik, 1999, p. 45).

However, Wennekers and Thurik (1999) continue to use the terms intrapreneurship and corporate entrepreneurship synonymously in their work as it is a frequent practice today and classify them as one of three kinds of entrepreneurs as shown in table III. That is of interest for this paper because it supports the explanation of what an intrapreneur is and why the collection of primary data targeted mainly employees and not managers or freelancers.

TABLE III. THREE TYPES OF ENTREPRENEURS (WENNEKERS AND THURIK, 1999)

	Self-employed	Employee
Entrepreneurial	Schumpeterian entrepreneurs	Intrapreneurs
Managerial	Managerial business owners	Executive managers

Antoncic and Hisrich undertook a wide range of research in the intrapreneurship area. In their 2001 paper, they refine the intrapreneurship construct and evaluate it in a cross cultural background comparing its application in the US- and the Slovenian economy (Antoncic and Hisrich, 2001). They identify four dimensions of intrapreneurship according to the literature that are (1) new business venturing, (2) innovativeness, (3) self-renewal, and (4) proactiveness and combine them as part of one refined intrapreneurship construct. The four dimensions are considered to be suitable for this, because they are “distinctive

enough (discriminant) not to be redundant and at the same time similar enough (correlated–convergent) to pertain to the same construct” (Antoncic and Hisrich, 2001, p. 500). Next to this construct, their paper identifies intrapreneurship as an important predictor of firm growth and names the following aspects to be supportive for organizations to become more intrapreneurial:

- (1) Open and quality communication
- (2) existence of formal controls
- (3) intensive environmental scanning
- (4) management support
- (5) organizational support and values

Their research led to a further development of the intrapreneurship construct in 2003 by adding four additional dimensions. Antoncic and Hisrich (2003) suggest that the eight dimensional framework helps to position intrapreneurship more clearly in the management literature and highlights similarities and differences to other concepts. The framework is clearly based on their previous work and now includes (1) new ventures, (2) new businesses, (3) product/service innovativeness, (4) process innovativeness, (5) self-renewal, (6) risk taking, (7) proactiveness, and (8) competitive aggressiveness. In contrast to Alpkhan et al. (2010), the focus of Antoncic’s and Hisrich’s research clearly is more on the organization than on the individual intrapreneur.

Although these and various other aspects of intrapreneurship have been intensively researched over the last decades, intrapreneurship-related theories that support organizations to thrive in times of globalization, digital transformation and fast changing competitive environments have increasingly been recognized and addressed by recent research (Baruah and Ward, 2014; Calisto and Sarkar, 2017; Dentchev et al., 2016; Douglas and Fitzsimmons, 2012; Skarmeas, Lisboa and Saridakis, 2016) making it a field that has not lost its relevance and topicality. However, there has been very little research yet on whether or not and under which circumstances employees would be willing to act as intrapreneurs and if such behavior might increase their motivation. As employees’ behavior is linked to job demands and the working environment they operate in (Alfes et al., 2013; Bakker and Demerouti, 2007; Janssen, 2000; Westerman and Yamamura, 2007), conditions for a supportive environment for intrapreneurship are considered to be important in this context.

Alpkhan et al. (2010) performed research on how organizations support intrapreneurship and assessed that the innovation performance increases when employees get the possibilities to access important resources and conditions for the development of innovative ideas and projects. In particular, they defined five basic organizational arrangements based on the literature (e.g. Hornsby et al. (2009); Kuratko, Hornsby and Goldsby (2004); Kuratko et al. (2005)) that create a supportive environment for intrapreneurship. These relate to the research of Antoncic and Hisrich (2001) and show certain similarities, but also differences to their previously introduced supportive aspects for organizations to become more intrapreneurial, what is outlined in table IV. It shows that both papers have similarities in their description of how to create a supportive environment for intrapreneurship. Both agree to foster intrapreneurship through support from the management and the organization that allows trial-and-errors and creative processes. Alpkhan et al.’s

convenient organizational structures might be linked to an open and quality communication as described by Antoncic and Hisrich, but there lays also the huge difference that Alpkhan et al. suggest decentralization or decision-making autonomy whereas Antoncic and Hisrich request the existence of formal controls. The aspects in the last part of table IV are not linked and belong to one paper respectively.

TABLE IV. ASPECTS SUPPORTING INTRAPRENEURSHIP

<b>Alpkhan et al. (2010)</b> <i>(supporting individual intrapreneur)</i>	<b>Antoncic and Hisrich (2001)</b> <i>(supporting the organisation)</i>
<b>similarities</b>	
management support for generating and developing new business ideas	management support
tolerance for trial-and-errors or failures in cases of creative undertakings or risky project implementations	organizational support and values
convenient organisational structures concerning, in particular, decentralisation level or decision-making autonomy	open and quality communication
<b>differences</b>	
convenient organizational structures concerning, in particular, decentralization level or decision-making autonomy	existence of formal controls
<b>aspects that are not linked</b>	
allocation of free time	
	intensive environmental scanning
appropriate use of incentives and rewards	

Based on the new perspectives towards employees’ mind-sets and changing paradigms about people in organizations that have been identified as an important background of the development of intrapreneurship-related concepts, it is suggested to add two more, probably more general aspects to the description of a supportive environment for intrapreneurship. The first aspect is the task design of daily work and whether that is related to ‘coping’ or ‘expression’ (Maslow, 1970), meaning whether employees’ tasks are rather prescribed and determined to cope with given challenges or rather intuitive and create to express own ideas and approaches. The second aspect is a description of the relationships within the working environment and whether they are closer to cooperation and trust or monitoring and control (Hassan et al., 2012; Nyhan, 2000). These aspects are considered to be of particular importance, because an intrapreneur requires permanent opportunities to work on and to contribute its creative ideas to flourish. Accordingly trust among employees and between employees and the management is essential so that these ideas can be shared with no fear that they might get stolen or rejected. Whilst the aspect of trust has not been considered by Alpkhan et al. (2010) and Antoncic and Hisrich (2001), it is acknowledged that the concept of expression to some extent relates to their suggestion of management support for generating and developing new business ideas and the allocation of free time. However, this does not take into account the frequent opportunity to contribute or express creative ideas, not only during free time, but also in course of daily work processes.



### III. POTENTIAL RISK RELATED TO INTRAPRENEURSHIP

Much of the literature on risk taking and risk management in the social sciences has focused on the control and management of risk taking by individuals and organizations. The literature over the last 30-40 years has focused on 'decision-making' (Lopes, 1987; Pidgeon, 1991; Reason, 1990) and 'irrationality' (Lichtenstein, 1978; Slovic, et al, 1980) in psychology, systems approaches in management (Perrow, 1984; Turner, 1978), risk communication approaches in sociology (Wynn, 1989; Irwin, 1995) and cultural understandings of risk in anthropology (Douglas and Wildavsky, 1982). The focus of much of this literature has been to either minimize the risk or even to remove the risk. For example, the ALARP (as low as reasonably practicable) principle is to reduce the residual risk (inherent risk minus controls) as far as reasonably practicable (as long as the cost of the control measure does not outweigh its benefit). Inherent risks may be treated using many options such as modifying the level of risk by introducing or altering controls such as the implementation of national/international industrial standards ranging from a Business Continuity Management System to an Information Security Management System, accepting the risk, avoiding the risk by withdrawing from an activity or changing the conditions under which the activity is operated or sharing the risk with external parties (insurance or outsourcing).

The focus has changed more recently with an increasing interest in encouraging risk appetite. New initiatives in crisis and resilience management are also of interest as they place more emphasis on building a capability to deal with consequences of risk downside, rather than elimination (Borodzicz, 2005; BSi 11200, 2014). In relation to literature on intrapreneurship this poses some interesting opportunities for cross fertilization of two distinct areas of the literature. Entrepreneurship is perhaps a natural home for risk taking behavior, with a model of business ventures where individuals are able to risk their money and ideas against a market where they stand to win or lose. For intrapreneurship, the risk taker is not directly liable for the downside of the risk, but is empowered to take this risk on behalf of the entrepreneur, other than perhaps their job security and reputation, they are being encouraged to take risks gambling without risking their own money.

At one level increasing organizational risk taking by employees is already part of many organizations activities. In the world of project management, we see moves towards increasing organizations risk appetite, for example in project management in order to increase opportunities for upside risks where projects are able to save time/money and projects can finish early (Chapman and Ward, 2011). Risk taking in the financial industry is also a poignant example, trading rooms where commodities and shares are traded could not happen without traders operating with the permission of the employers. This raises questions about how one should control excessive risk taking in these contexts, and to what extent employers might actually have put staff under such pressure that they start to trade illegally, cases such as Nick Leeson who was jailed for overtrading and bringing about the demise of Barings (Bank Leeson, 2005). The links between risk taking behavior and decision making literature and the literature on intrapreneurship need to be explored further, it is clear both activities are inextricably linked.

### IV. CRITIQUE OF INTRAPRENEURSHIP

Although the concept of intrapreneurship is widely recognized by academics, there are also researchers who take a critical position. In his paper Morse (1986) claims that large organizations could never provide the rewards and autonomy that an individual requires to act entrepreneurial and that intrapreneurship therefore could not lead to successful innovation. Recent research however indicates that this is not the case or at least strongly depends on the individual organization (Calisto and Sarkar, 2017; Shipper et al., 2014; Wennekers and Thurik, 1999). Carrier (1994) furthermore suggests that there should be a difference in the research approaches towards intrapreneurship in large organizations on the one hand and in SMEs on the other hand, because these types of organizations create fundamentally different environments for intrapreneurial behavior.

Another issue is pointed out by Reitz (1998) who warns of the uncertainty that intrapreneurs can experience related to ethics of business conduct, when this is not prescribed by the management. He states that the intrapreneurs might behave as either 'pirates and gamblers' striving success at any price or 'knights and saints' acting for the benefit of the organization and its environment.

Finally, a wide range of research has been done on the psychological contract. Since its introduction in the 1960s by the work of Argyris (1960), this theory concerning the employment relationship has become an important aspect of HRM research (Cullinane and Dundon, 2006; Rousseau, 1989; Rousseau, 2001). It might contribute to a critical view on intrapreneurship, as it suggests that there are different expectations on the site of the employer and the employee when it comes to agreements on the amount and kind of work. Employees might not consider intrapreneurial behavior as 'part of their job', so they might feel under pressure by employer requesting according behavior. However, it is also claimed that the psychological contract needs further development until it becomes a viable framework that provides real understanding of the relationship between employees and employers (Guest, 2004).

### V. METHODOLOGY

Employees' willingness to adopt intrapreneurial behavior can be identified as a necessary condition for its positive impacts on innovation and growth in organizations (Wennekers and Thurik, 1999). To carry out this research project, a quantitative methodology under consideration of a deductive research approach and a philosophy of critical realism is used to assess employees' attitudes towards intrapreneurship and their willingness to adopt intrapreneurial behavior.

A survey was designed and carried out in 2015 targeting working individuals throughout all industries, gender and age group within businesses in Germany, especially Saxony and the UK, especially Scotland. These regions had been chosen for the reason of good local networks of the researchers involved in this project. The set goal was to receive 100 responses for each country. A mixture of non-probability sampling methods including quota and volunteer sampling approaches under consideration of social network theory led to 120 valid completed surveys, 100 from Germany and 20 from the UK.

As the response rate in the UK was that low, an appropriate quota for a cross-country comparison was not reached. Therefore, the further analysis relates solely to the data from Saxony, Germany. Given the limited resources for this research project, non-representative sampling approaches had to be chosen and it is not possible to make generalizing conclusions for the population by analyzing the sample. However, the sample is well structured and shows strong similarities to the official structure of the Saxon economy in terms of the targeted industry sectors what is outlined in table V. This should allow sufficient insights for the aims of this research project. Further details of the sample structure are set out in Annex I.

TABLE V. ECONOMIC SECTORS IN SAXONY 2015

Own Survey			Statistical Office of the Free State of Saxony		
<i>Economic sector</i>	<i>Frequency</i>	<i>Percent</i>	<i>Economic sector</i>	<i>Frequency</i>	<i>Percent</i>
<b>Agriculture</b>	<b>1</b>	<b>1.0</b>	<b>Agriculture</b>	<b>28.9</b>	<b>1.5</b>
<b>Industry</b>	<b>21</b>	<b>21.0</b>	<b>Industry</b>	<b>572.7</b>	<b>29.5</b>
manufacturing	13	13.0			
construction	8	8.0			
<b>Services</b>	<b>76</b>	<b>76.0</b>	<b>Services</b>	<b>1334.2</b>	<b>69.0</b>
public	24	24.0			
administration					
other services	12	12.0			
education &	10	10.0			
training					
healthcare	9	9.0			
trade	8	8.0			
finance &	6	6.0			
insurance					
tourism &	3	3.0			
gastronomy					
energy & water	2	2.0			
supply					
traffic &	2	2.0			
transport					
<b>Others</b>	<b>1</b>	<b>1.0</b>			
<b>n.a.</b>	<b>1</b>	<b>1.0</b>			
<b>Total</b>	<b>100</b>	<b>100.0</b>	<b>Total</b>	<b>1936.0</b>	<b>100.0</b>

According to official numbers from the Statistical Office of the Free State of Saxony that conducted a representative study with a sample size of 1936, most employees work in services (69.0 %), while 29.5 % work in industry and only 1.5 % in the agricultural sector, indicating an above average focus on industry compared to national average (Statistisches-Landesamt-des-Freistaates-Sachsen, 2016). The data analysis has been conducted using IBM SPSS statistics and the displayed tables follow the standard style of this software. The results of the conducted survey have been used for ongoing intrapreneurship-related research projects of the authors.

## VI. DATA ANALYSIS AND FINDINGS

As this paper aims to enhance our understanding of employees' willingness to act as intrapreneurs and what are appropriate conditions for the working environments to encourage such behavior, the survey focused on an analysis of employees' attitudes towards their organizations and their willingness to adopt intrapreneurial behavior. Within this section, the findings of the survey are presented and it is assessed whether or not employees are willing to act as intrapreneurs. Based on the definitions of intrapreneurship (table I) and the aspects that support intrapreneurial behavior (table IV) outlined

in the theoretical background section, the following points have been chosen for examination through the survey related to the individual willingness to act intrapreneurial and the assessment of the working environment:

### *Individual:*

- (1) sharing own ideas
- (2) shaping the organization's future
- (3) motivating factors

### *Environment:*

- (1) trust versus control
- (2) expression versus coping
- (3) opportunities for
  - a. contribution of knowledge and expertise
  - b. hearing of opinion
  - c. participation with own ideas

To get insights in employees' willingness for intrapreneurial behavior, the participants of the survey have been questioned about three aspects related to their individual attitudes that are set out in table VI.

TABLE VI. THREE ASPECTS OF INDIVIDUAL ATTITUDES

I would like to have better opportunities to participate with my ideas.					
valid		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
	<i>totally agree</i>	26	26.0	26.0	26.0
	<i>tend to agree</i>	29	29.0	29.0	55.0
	<i>neither</i>	19	19.0	19.0	74.0
	<i>tend to disagree</i>	7	7.0	7.0	81.0
	<i>totally disagree</i>	14	14.0	14.0	95.0
	<i>n.a.</i>	5	5.0	5.0	100.0
	<b>Total</b>	100	100.0	100.0	
Actively shaping the future of my company motivates me.					
valid		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
	<i>totally agree</i>	25	25.0	25.0	25.0
	<i>tend to agree</i>	35	35.0	35.0	60.0
	<i>neither</i>	17	17.0	17.0	77.0
	<i>tend to disagree</i>	7	7.0	7.0	84.0
	<i>totally disagree</i>	12	12.0	12.0	96.0
	<i>n.a.</i>	4	4.0	4.0	100.0
	<b>Total</b>	100	100.0	100.0	
Which of the following factors motivates you most at work?					
valid		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
	<i>good wages</i>	18	18.0	18.0	18.0
	<i>appreciation</i>	21	21.0	21.0	39.0
	<i>promotion and growth</i>	2	2.0	2.0	41.0
	<i>identification with the company</i>	7	7.0	7.0	48.0
	<i>job security</i>	28	28.0	28.0	76.0
	<i>shaping the organization's future</i>	5	5.0	5.0	81.0
	<i>being integrated in critical processes</i>	4	4.0	4.0	85.0
	<i>interesting work</i>	15	15.0	15.0	100.0
	<b>Total</b>	100	100.0	100.0	

Although this might lead to the hypothesis that those who do not want better opportunities to participate with their own ideas (21.0 %) are the same survey participants that do not feel motivated by shaping their organization's future (19.0 %), a crosstabulation analysis set out in table VII shows that this is not the case. It appears that most of those who do not want to have better opportunities to participate with their ideas actually totally agree or tend to agree that they are motivated by shaping the future of their organization and that most of those who are not

motivated by shaping the future of their organization totally agree or tend to agree that they want to have better opportunities to participate with their ideas. This might lead to the assumption that the survey participants who feel motivated by shaping their organization's future already have very good opportunities for participation and that those who don't feel motivated by this experience with insufficient participation opportunities what actually leads to not feeling motivated.

TABLE VII. SHAPING ORGANISATIONS' FUTURE

		Actively shaping the future of my organisation motivates me.						Total
		<i>totally agree</i>	<i>tend to agree</i>	<i>neither</i>	<i>tend to disagree</i>	<i>totally disagree</i>	<i>n.a.</i>	
<b>I would like to have better opportunities to participate with my ideas.</b>	<i>totally agree</i>	5	6	6	1	7	1	26
	<i>tend to agree</i>	6	13	5	2	3	0	29
	<i>neither</i>	4	8	3	2	0	2	19
	<i>tend to disagree</i>	2	3	1	1	0	0	7
	<i>totally disagree</i>	7	5	0	1	1	0	14
	<i>n.a.</i>	1	0	2	0	1	1	5
	<b>Total</b>	25	35	17	7	12	4	100

The evaluation of further motivation factors, however, shows that other motivation factors are of more existential importance. To the question about what factor motivates them most at work, the survey participants answered that this would be job security (28.0 %), appreciation (21.0 %), good wages (18.0 %) and an interesting work (15.0 %). Only 5.0 % of those questioned stated that shaping the organization's future would be their most important motivation factor. This might indicate that some basic requirements need to be fulfilled before employees can develop to become intrapreneurs.

To deepen the understanding of working environments that are appropriate for intrapreneurial behavior, three related aspects are evaluated through the survey that should add to the work of Alpkan et al. (2010) and Antoncic and Hisrich (2001).

The first aspect is displayed in table VIII. Because it is assumed that trust and opportunities to cooperate are essential for intrapreneurial behavior, the participants of the survey have been asked to assess whether they work in an environment of cooperation and trust or monitoring and control. This also relates to previous research concluding that participation, feedback and empowerment of the staff have a positive impact on interpersonal trust (Hassan et al., 2012) and that this might lead to increased productivity and organizational commitment (Nyhan, 2000). Although in 59.0 % of those questioned describe the relationships in their organization to be characterized by cooperation and trust to some extent, the emphasis of this aspect is different. Only 14.0 % think that the relationship of cooperation & trust is strong and 20.0 % only describe it to be 'rather cooperation and trust'. It is alarming that 28.0 % of those surveyed state that the relationships in their organization are characterized by monitoring and control, 12% even say strong monitoring and control, what might be an indicator for a rather toxic working environment. However, it is considered to be supportive for intrapreneurship at work that a majority of the survey participants works in an environment of cooperation and trust, as intrapreneurship is much more likely to be successful in

such environments (Antoncic and Hisrich, 2001; Hassan et al., 2012).

TABLE VIII. RELATIONSHIP IN ORGANISATIONS

How would you describe the relationships in your company?					
valid		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
	<i>n.a.</i>	1	1.0	1.0	1.0
	<i>strong cooperation &amp; trust</i>	14	14.0	14.0	15.0
	<i>cooperation &amp; trust</i>	24	24.0	24.0	39.0
	<i>rather cooperation &amp; trust</i>	20	20.0	20.0	59.0
	<i>balanced</i>	13	13.0	13.0	72.0
	<i>rather monitoring &amp; control</i>	7	7.0	7.0	79.0
	<i>monitoring &amp; control</i>	9	9.0	9.0	88.0
	<i>strong monitoring &amp; control</i>	12	12.0	12.0	100.0
	<b>Total</b>	100	100.0	100.0	

The second aspect set out in table IX is supposed to analyze the characteristics of daily tasks at work and to assess whether they are rather prescribed and determined in relation to Maslow's concept of coping or rather intuitive and creative related to his concept of expression (Maslow, 1970). The background lies in the assumption that an employee who needs to cope with given problems throughout the working day as neither the time nor the motivation to act in an intrapreneurial way. Intuitive tasks that allow the expression of own ideas, however, can support employees' creativity and lead to intrapreneurial behavior. Against this background, it is rather unfavorable that a majority of 57.0 % of those surveyed states that their tasks are prescribed and determined and only 24.0 %

describe them as intuitive and creative. 19.0 % of those surveyed think that there is a balance between those kinds of tasks.

TABLE IX. RELATIONSHIP IN ORGANISATIONS

Are your tasks rather prescribed/determined or intuitive/creative?					
valid		Frequency	Percent	Valid Percent	Cumulative Percent
	<i>strongly prescribed &amp; determined</i>	24	24.0	24.0	24.0
	<i>prescribed &amp; determined</i>	25	25.0	25.0	49.0
	<i>rather prescribed &amp; determined</i>	8	8.0	8.0	57.0
	<i>balanced</i>	19	19.0	19.0	76.0
	<i>rather intuitive &amp; creative</i>	11	11.0	11.0	87.0
	<i>intuitive &amp; creative</i>	9	9.0	9.0	96.0
	<i>strongly intuitive &amp; creative</i>	4	4.0	4.0	100.0
	<b>Total</b>	100	100.0	100.0	

The third aspect evaluates further factors that describe the working environments of the survey participants. It analyzes the opportunities for the participants' contribution of knowledge and expertise, hearing of opinion and participation with own ideas.

The results show that a majority of those surveyed has the frequent opportunity to contribute their knowledge and expertise (69.0 %) and that their opinion about issues within the organization are heard (56.0 %). Both factors are considered to be indicators for a positive culture related to sharing information, knowledge and opinions, which is considered to be an important prerequisite for intrapreneurial behavior and successful intrapreneurship (Harms, 2015; Menzel, Aaltio and Ulijn, 2007; Parker, 2011).

As the generation of ideas is the starting point of any innovation process (Aleksieva, 2014; Galanakis, 2006), regardless if it happens in an entrepreneurial or intrapreneurial way, the opportunities of contributing own ideas are considered to be important for successful intrapreneurship as well. The survey participants have therefore been asked about whether or not they feel motivated to show initiative regarding their own ideas. While a majority of 64.0 % totally agrees or tends to agree that they feel motivated to show initiative regarding their own ideas, what could be interpreted as organizations' attempt to trigger intrapreneurial behavior. This links back to the first aspect of the assessment of the individual intrapreneur, where the question was raised whether the opportunities to participate with ideas in the surveyed organizations are not very good yet and they need to be improved or that they are already good, but that there is a strong desire towards intrapreneurial behavior that requires even better and more extensive opportunities for participation. Given that 64.0 % of those surveyed state that they feel motivated to show initiative regarding their own ideas and 55.0 % desire even better participation opportunities, one could assume that there lies a huge potential for intrapreneurship at work and that a majority of the surveyed employees is willing to adopt intrapreneurial behavior.

TABLE X. OPPORTUNITIES FOR PARTICIPATION

I get the opportunity to contribute my knowledge/expertise frequently.					
valid	valid	valid	valid	valid	valid
	<i>totally agree</i>	17	17.0	17.0	17.0
	<i>tend to agree</i>	39	39.0	39.0	56.0
	<i>neither</i>	16	16.0	16.0	72.0
	<i>tend to disagree</i>	8	8.0	8.0	80.0
	<i>totally disagree</i>	18	18.0	18.0	98.0
	<i>n.a.</i>	2	2.0	2.0	100.0
	<b>Total</b>	100	100.0	100.0	
My opinion about internal company issues is heard.					
valid	valid	valid	valid	valid	valid
	<i>totally agree</i>	22	22.0	22.0	22.0
	<i>tend to agree</i>	42	42.0	42.0	64.0
	<i>neither</i>	19	19.0	19.0	83.0
	<i>tend to disagree</i>	10	10.0	10.0	93.0
	<i>totally disagree</i>	7	7.0	7.0	100.0
	<i>n.a.</i>	100	100.0	100.0	
	<b>Total</b>	22	22.0	22.0	22.0
I feel motivated to show initiative regarding my own ideas.					
valid	valid	valid	valid	valid	valid
	<i>totally agree</i>	29	29.0	29.0	29.0
	<i>tend to agree</i>	40	40.0	40.0	69.0
	<i>neither</i>	15	15.0	15.0	84.0
	<i>tend to disagree</i>	5	5.0	5.0	89.0
	<i>totally disagree</i>	8	8.0	8.0	97.0
	<i>n.a.</i>	3	3.0	3.0	100.0
	<b>Total</b>	100	100.0	100.0	

## VII. CONCLUSION

By identifying aspects of intrapreneurial behavior and characteristics of environments that support intrapreneurship this paper has sought to evaluate the willingness of employees to act as intrapreneurs and to what extent the surrounding working environments would support such behavior. The time scale and table of influential papers compiled in the theoretical background section provide a decent outline that enriches and deepens the understanding of the development of different intrapreneurial concepts and theories over the decades. It would be wrong, however, to claim that this overview aspires complete comprehensiveness rather than being an outline of a developmental process that supported the aim of this paper to evaluate the attitudes of employees towards intrapreneurial behavior at work and what kind of working environments are suitable to encourage such behavior.

The data analysis focused on three aspects that characterize attitudes of the individual intrapreneur and three aspects that characterize the related working environment. The results indicate that a majority of the survey participants would want to act as an intrapreneur or already does. It has been found that they have a strong interest in sharing their own ideas and that they desire better opportunities to do so although their working environments indicate that the present opportunities are already good. Those questioned stated to feel motivated through shaping their organization's structure, however, the results imply that basic motivation factors such as job security and good wages need to be fulfilled first. The findings concerning the working

environments and whether or not they are appropriate to trigger or support intrapreneurial behavior vary. Indicators for a positive working environment in the intrapreneurial context is the fact that most of those surveyed stated to have really good opportunities for participation with either knowledge and expertise, ideas or their opinion. Also, a majority of those questioned seems to work in an environment of cooperation and trust, what is considered to be essential for intrapreneurial behavior. Still, over a quarter of those surveyed stated to work in an environment of monitoring and control that could not support intrapreneurial behavior. It is also alarming that a majority of the survey participants seems to work in an environment of coping, where tasks are prescribed and determined what does not allow the flexibility for intrapreneurial behavior like for example the contribution of ideas.

One could therefore conclude that the willingness of employees to adopt intrapreneurial behavior is widely existing. Suitable working environments, however, do only partially exist and organizations that want employees to innovate and act as intrapreneurs might need to change the conditions they provide. Organizations' restraint in this course might relate to the risk involved in intrapreneurship, where the intrapreneur is not directly liable for the downside of the risk, but is empowered to take this risk on behalf of the organization. These links between risk taking behavior and intrapreneurship would benefit from further research in the future, as both activities are inextricably linked. Furthermore, future research could enhance the significance of the suggested findings by a collection of further data and the identification and test of further indicators of employees' willingness for intrapreneurial behavior.

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## Annex I – Sample Structure

### Company Information

#### Which economic sector is most likely related to your company?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid n.a	1	1.0	1.0	1.0
energy & water supply	2	2.0	2.0	3.0
tourism & gastronomy	3	3.0	3.0	6.0
manufacturing	13	13.0	13.0	19.0
healthcare	9	9.0	9.0	28.0
education & training	10	10.0	10.0	38.0
traffic & transport	2	2.0	2.0	40.0
public administration	24	24.0	24.0	64.0
other services	12	12.0	12.0	76.0
finance & insurance	6	6.0	6.0	82.0
Agriculture	1	1.0	1.0	83.0
trade	8	8.0	8.0	91.0
construction	8	8.0	8.0	99.0
others	1	1.0	1.0	100.0
Total	100	100.0	100.0	

#### How many employees work for your company?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid n.a.	1	1.0	1.0	1.0
≤ 10 employees	12	12.0	12.0	13.0
≤ 50 employees	20	20.0	20.0	33.0
≤ 250 employees	19	19.0	19.0	52.0
> 250 employees	48	48.0	48.0	100.0
Total	100	100.0	100.0	

#### What is your particular position within your company?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid n.a.	5	5.0	5.0	5.0
management	6	6.0	6.0	11.0
employee	79	79.0	79.0	90.0
freelancer	2	2.0	2.0	92.0
other	8	8.0	8.0	100.0
Total	100	100.0	100.0	



## Personal Information

### What is your sex?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	n.a.	1	1.0	1.0	1.0
	male	47	47.0	47.0	48.0
	female	52	52.0	52.0	100.0
	Total	100	100.0	100.0	

### What is your age-group?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	n.a.	1	1.0	1.0	1.0
	under 20	2	2.0	2.0	3.0
	20 – 29	13	13.0	13.0	16.0
	30 – 39	15	15.0	15.0	31.0
	40 – 49	30	30.0	30.0	61.0
	50 – 59	33	33.0	33.0	94.0
	60 or older	6	6.0	6.0	100.0
	Total	100	100.0	100.0	

### What is your nationality?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	German	100	100.0	100.0	100.0